



Quarterly

for the Business Community of the City of Albuquerque

FROM THE CITY OF ALBUQUERQUE, WASTEWATER UTILITY DIVISION'S POLLUTION PREVENTION PROGRAM

ALBUQUERQUE BUSINESSES RECEIVE EPA AWARDS

Two Albuquerque businesses have been singled out by Region 6 EPA. The two businesses, Theta Plate and Carl's Darkroom received recognition for their pollution prevention activities. The awards were presented on September 5, 1997 at the New Mexico State Capitol Rotunda in Santa Fe. Theta Plate was awarded with the Pollution Prevention Award "for excellence in implementing pollution prevention techniques." Carl's Darkroom was awarded the Recycling Award "for outstanding contributions in pollution prevention and recycling."

Presenting the awards was Lynda F. Carroll, Acting Deputy Regional Administrator for EPA Region 6 with Mark Weidler, Sec. Of the New Mexico Environment Department as the Master of ceremonies.

Ms. Carroll presented the businesses with an award with the EPA Environmental

Excellence Flag and a lapel pin for each individual of the winning businesses.

Theta Plate

Theta Plate is a electroplating company. They have assisted the City's Pollution Prevention Program since 1992 in P2

efforts for Albuquerque's plating industry.

Theta Plate is being recognized for their overall facility pollution prevention, including efforts in waste reduction, reuse and recycling. This facility has eliminated CFC's in favor of aqueous degreasing and does not strip

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or electroplate chrome. Triple rinse drag out tanks are placed at all potentially toxic plating baths.

Theta Plate is planning to purchase a state-of-the-art batch treatment system for all process wastewater. This new system will eventually be refined for zero discharge, which is Theta's long-term goal.

Carl's Darkroom

Carl's Darkroom is a photographic film processing facility. They have assisted the City's Pollution Prevention Program since 1992 in P2 efforts for the Albuquerque photoprocessing industry. Carl's Darkroom is being recognized for their efforts in recycling.

Carl's Darkroom uses a silver recovery unit, which consists of a metered electrolytic unit and two silver recovery cartridges. The business regenerates their C-41 bleach fix at a rate of 5,830 gallons/year. They also use a "Refrema Slide Film Processor" which has a low rate of water use (2-3.5 gallons per minute). Water only runs when there is film in a wash tank.

All plastic film cans, and spools are either given away for reuse or sent to a plastics recycler. Cardboard is sent to a cardboard recycler, and metal 35mm film cans are sent to a metals recycler. Reject slide mounts and plastic chemical containers (rinsed) are all sent to a plastics recycler. Also,

Styrofoam peanuts are sent to a business that resells them. And as an incentive, Carl's pays customers five-cents to bring back clean reusable slide boxes.

The two awards were unique in that both businesses were so small. For the past 12 years EPA Region 6 typically gave these awards to much larger businesses, but due to Theta Plate's and Carl's Darkroom's activities they more than deserved the recognition and the awards.



5PPM AND POLLUTION PREVENTION AWARDS

The Pollution Prevention Program provides two awards for Albuquerque businesses: the 5PPM Silver Award and the P2 Award.

5PPM Silver Awards are given to businesses that implement pollution prevention methods to reduce silver discharges. Most businesses involved in the 5PPM Silver award are those that use silver in their manufacturing process, such as jewelry manufacturers, photoprocessors, printers, recyclers, and suppliers. To receive a 5PPM Award you need only meet and maintain a process discharge limit of 5 mg/L (milligrams per liter or parts per million[PPM]).

Pollution Prevention Awards are a step up from the 5PPM Awards. These awards look business wide at pollution prevention efforts. There is no strict criteria for the P2 Award except that a business should be doing as much waste reduction, recycling and material reuse as economically possible and without violating any known environmental regulation.

Both awards require a business walk-through with a P2 representative. If you do not meet the criteria for an Award the P2 Program will work with you to reach the goal. Both Awards are endorsed by the New Mexico Silver Users Association.

If you are interested in the Awards give us a call.

5 PPM AND P2 AWARD MEMBERS



Photoprocessing

- ✓ Albuquerque Color Lab
- ✓ Bill Mohr Photography
- ✓ Bob Davis Photography
- ✓ Brooks Photo
- ✓ City of Albuquerque Records Center
- ✓ Camera & Darkroom
- ✓ Camera Graphics Photolab
- ✓ Camera Works
- ✓ Carl's Darkroom
- ✓ Central Photographic
- ✓ Chuck Gallagher
- ✓ Cibola High School
- ✓ Comgraphix
- ✓ Designs & Images
- ✓ Dick Ruddy Photography
- ✓ El Dorado High School
- ✓ Family Practice X-Ray
- ✓ Fox Photo (6 locations)
- ✓ Fine Print Custom Darkroom
- ✓ Image Masters
- ✓ Kim Jew Photography
- ✓ Lovelace Health Systems
- ✓ Mountain Shadows Photo
- ✓ Norman Johnson Photography
- ✓ Pat Berrett, Photographer
- ✓ Presbyterian Hospital
- ✓ Pacific Western Technologies
(previously known as Koogle & Pouls
Engineering)
- ✓ Ritz Camera Center (2 locations)
- ✓ Robert Reck Photography
- ✓ Sandia High School
- ✓ Smith's Food & Drug Centers, Inc.
- ✓ Thomas R. Mann
- ✓ Wal-Mart One Hour Photo Center #824

Jewelry Manufacturing

- ✓ Bilagaanas
- ✓ Boston Brass
- ✓ Castings on Parade
- ✓ DGW Inc. DBA G & S Jewelry Mfg.
- ✓ Designs by Sanel
- ✓ DoPaso Corp.
- ✓ Hutch's Casting
- ✓ Jezlaine
- ✓ Inca Silver & Gold
- ✓ Indian Jewelers Supply
- ✓ Indian Silver Crafts
- ✓ Milaine Jewelers
- ✓ NAKAI
- ✓ Quoc Turquoise
- ✓ Shube's
- ✓ Sundancer Jewelry
- ✓ Sunwest Silver Company

Printing

- ✓ Academy Printers
- ✓ Kwik Kopy Printing
- ✓ Starline Printing
- ✓ UNM Daily Lobo
- ✓ WBC Inc. DBA Lithexcel

Others

- ✓ Academy Corporation
- ✓ Academy Precision Materials
- ✓ Circuit Shop
- ✓ Doctors Supply
- ✓ General Technology
- ✓ Honeywell Defense Avionics
- ✓ Southwest Radiographic
- ✓ Red Sky Plating
- ✓ Rio Grande Zoo
- ✓ Theta Plate, Inc.
- ✓ UNM Cancer Center
- ✓ UNM Carrie Tingley Hospital
- ✓ UNM Student Health center
- ✓ UNM TEM Laboratory



* DBA = Doing Business As

WHAT IS THE POLLUTION PREVENTION (P2) PROGRAM

Who We Are and What We Can Do For You

What is Pollution Prevention

Pollution prevention is the use of practices, materials, and/or processes that reduce or eliminate the creation of pollutants at the source. This includes: equipment modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control that results in your business reducing wastes. Simple methods to reduce spills or retraining employees in proper process methods can reduce the amount of wastes you generate. Pollution prevention can also save you money by reducing your disposal costs and increase the amount of material you reuse or recycle.

What is the P2 Program

In September of 1992, the City of Albuquerque received a 2 year Pilot Program grant from the United States Environmental Protection Agency (EPA) and the New Mexico Environment Department to initiate a technical assistance Pollution Prevention Program for businesses within the City. The Pilot Program grew into a permanent program within the Wastewater Utilities Division of the Public Works

Department. The goal of the Program is to assist businesses in reducing or eliminating pollutants through the use of pollution prevention, as defined earlier. If pollution is reduced, businesses and the City spend less time and money on waste treatment, disposal and regulatory compliance.

Why do We Need a P2 Program

The City of Albuquerque owns and operates New Mexico's largest municipal wastewater treatment plant: the Southside Water Reclamation Plant (SWRP). This facility is capable of receiving and treating 76 million gallons of domestic wastewater on a daily basis. The Plant services more than 400,000 people, 100 permitted businesses and over 10,000 commercial accounts. Reduction of wastewater pollutants at their source eliminates the need for treatment and disposal, and results in smoother operations, helping to maintain compliance with the City's discharge to the Rio Grande, and provides a cleaner environment.

Who is the P2 Program

Pollution Prevention Program staff consists of one environmental engineer, two full-time waste minimization specialists, two



technicians, and one intern all with experience in industrial processes and wastewater pollutant reduction methods. Pollution Prevention Program staff are available to assist businesses in implementing pollution prevention activities within their facilities.

What the Program can do for You

Assistance can range from supplying information on vendors of a particular chemical or piece of equipment, to conducting a detailed on-site waste reduction assessment of an industrial facility. During a waste reduction assessment the pollution prevention team look to source reduction and pollutant elimination as the primary and inexpensive methods of reducing wastewater pollutant discharges. Also, wastewater samples can be taken and analyzed (free of charge) to determine the pollutants in your business' wastewater.

INTRODUCING THE CITY OF ALBUQUERQUE'S P2 QUARTERLY

Welcome to Albuquerque's first P2 Quarterly newsletter. We are excited to be creating a newsletter devoted to assisting businesses with pollution prevention.

You may be asking, what is pollution prevention and what does my business have to do with it? Pollution prevention is exactly what it sounds like.

It is the prevention of pollution. It makes a lot more sense to prevent something from occurring in the first place rather than allowing it to occur and then taking care of the problem. In our case the problem that we are dealing with is the safe and legal treatment of our collective City's wastewater.

As you may already know, the Southside Water Reclamation Plant is Albuquerque's only publicly owned wastewater

treatment facility and New Mexico's largest. It treats about 55 million gallons per day of mostly domestic wastewater and services over 400,000 people, 90 permitted businesses, and over 10,000 commercial accounts. The treatment plant is designed to treat domestic wastewater.

Wastewater from commercial and industrial processes can upset the treatment process if it contains pollutants that the wastewater treatment plant is not designed to handle. Wastewater that is received by the plant is treated to meet strict water quality standards before being discharged into the Rio Grande.

The practices and materials that your business uses is what affects the operation of the treatment plant. By adopting work practices and the use of materials that minimize wastes, your business will help the treatment processes at the plant to produce high quality reclaimed water and sludge. Businesses will profit by minimized wastes,

improved efficiency, and by contributing to maintaining their City's treatment plant high quality of wastewater treatment works.

With this newsletter we hope to keep you informed about waste reduction techniques and success stories featuring local businesses. Your input and feedback for this newsletter is important.

This newsletter will include information on many different types of businesses that the Pollution Prevention (P2) program is working with such as jewelry manufacturing, printers, photographers, laboratories, automotive services, metal finishing, machine shops, hospitals, dentists, printed circuit

board manufacturers and many more.

The P2 program staff consists of one environmental engineer, two waste minimization

specialists, two technicians, and one intern all with experience in industrial processes and waste reduction methods. Our staff is available to assist you with information on materials, processes, practices, and technologies that will reduce wastes. Staff is also available to collect and analyze wastewater samples from your processes in order to identify pollution prevention opportunities. We welcome you to our subscribers list for Albuquerque's P2 Quarterly and look forward to serving you and receiving your feedback for future issues of this newsletter.

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and success stories featuring
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DENTAL WASTE MANAGEMENT SURVEY RESULTS

In February 1996 the dental community in Albuquerque was surveyed by the City of Albuquerque, Wastewater Utility Division's, Pollution Prevention (P2) Program. This effort was a huge success thanks to the support from the Albuquerque District Dental Society and Albuquerque dentists. The P2 program and the Albuquerque District Dental Society worked together to develop the "Pollution Prevention Guidelines for Dental Offices", "Resource List for Dental Offices", the "Dental Waste Management Poster", and the survey form. This voluntary approach has great potential for long-term success. Dentists in Albuquerque provided an excellent response of 65% (228 dentists representing 172 offices, of 347 surveys).

The goal of the P2 dental outreach was to provide educational materials to dental offices and to encourage voluntary reductions in the discharge of silver, mercury and other metals to the City's Southside Wastewater Treatment Plant. Voluntary reductions are the



alternative to regulatory enforcement of the City's Sewer Use & Wastewater Control Ordinance standards. A strict silver discharge limit (3.72 micrograms per liter [ppb]) in the City's NPDES permit to discharge to the Rio Grande has made it necessary to reduce silver discharges City wide. The P2 program has worked with photoprocessors, printers, jewelers, dentists, laboratories, and auto shops to reduce sewer discharges containing silver, other metals and various chemicals.

Survey questions focused on the management of wastes from radiography and amalgam work. Based on the survey results, 95% percent of all dentists work with X-rays and 68% work with amalgam. The average amount of x-ray fixer purchased by a dental office is 1.2 gallons per month. Dental offices are small generators of spent photographic fixer yet every business can make a difference. Approximately 57% of surveyed dentists

sewer their fixer, 27% have it recycled, and 12% treat it on-site. Also, 55% of dentists indicated they don't know if their office uses cleaners containing chromium, whereas 43% indicated their use of non-chromium containing cleaners. Some 40% of dentists recycle their lead foil, 33% dispose of lead foil as trash, and 22% as medical/hazardous waste.

Survey results indicate that of the 117 offices using amalgam 47% recycle their scrap amalgam, 37% dispose of it as biomedical waste, and 10% toss it with their regular trash. Trap and filter amalgam is more difficult to recycle due to contamination. The survey results show that only 13% recycle amalgam from traps, 60% is disposed of as biomedical waste, and 15% toss it with their regular trash.

P2 Program personnel asks that all dental offices in Albuquerque voluntarily recycle or treat their spent x-ray fixer to remove silver before sewerage. As most dentists know, used photographic fixer may contain hundreds to several thousand parts per million of silver. Dentists should also know if chromium is present in their x-ray machine cleaners by

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referring to MSDS sheets or suppliers. If your office is using chromium containing cleaners



there are non-chromium alternatives commercially available that can be sewered. Other practices that we would like to encourage are the

recycling of lead foil, and of all (scrap and trap) amalgam. The P2 program thanks dentists and the Albuquerque District Dental Society members for their

cooperation and interest. A full report with detailed recommendations is being prepared.

CODES OF PRACTICE ARE AVAILABLE

Codes of Practice for several business sectors are currently available. Jewelry Manufacturing, Photoprocessing, Biomedical Labs, and Analytical Labs are currently available through the P2 Program. Data for dentists are also available.

Codes of Practice for Printers, the Automotive Industry, and ??? will be available soon.

The Codes of Practice are guides to developing and implementing pollution prevention within your business. The codes are very specific in the information presented and were developed with the assistance of local businesses and trade associations.

The information presented in the codes is designed to explain the regulations your business may face and methods of affordable pollution prevention techniques your business can implement to avoid regulatory problems. The primary focus of the codes is wastewater, but some additional concerns are addressed as necessary.

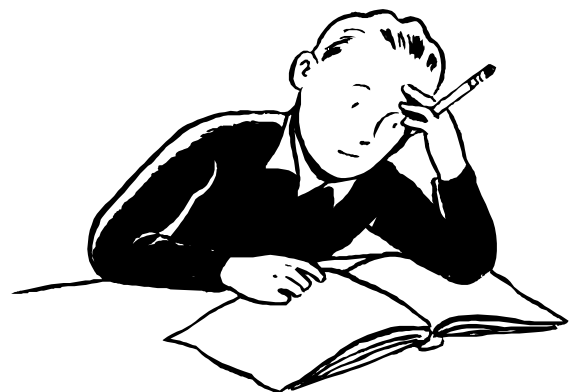
The codes are not regulatory documents. The information within the codes are suggestions of typical industry methods that have implemented and are being used by local businesses. Whether your business wishes to implement any of the techniques mentioned in a code of practice is your business' decision. The P2 Program does not require you to implement any concept mentioned in a code.

What the P2 Program does is work on voluntary compliance. This is a concept where a business recognizes the positive economic impact of recycling and waste reduction and make an effort to reduce their waste generation and waste discharge. The P2 Program recognizes that most small businesses need

to find the least expensive pollution prevention methods. This is where the P2 Program works with local businesses to find and develop the cheapest methods of pollution prevention available and currently in use by other businesses.

To date the P2 Program has distributed more than 300 Codes of Practice to the various industrial sectors. An estimated 200 to 500 Codes will be delivered within the next 1 ½ years.

There is no charge for the Codes of Practice.



Disclaimer

The City of Albuquerque does not endorse or recommend and product, process or company mentioned in this newsletter. Any pollution prevention activity conducted by any business is the responsibility of the business. Activities mentioned in this newsletter are activities conducted solely by those businesses and are mentioned herein as examples of pollution prevention activities researched and implemented by individual businesses.

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